



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,248	03/16/2001	Martin Fermann	A7984	2373
7590	04/08/2004		EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 PENNSYLVANIA AVENUE, N.W. WASHINGTON, DC 20037-3213				NGUYEN, KHIEM M
		ART UNIT	PAPER NUMBER	2839

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/809,248	FERMANN, MARTIN	
Examiner	Art Unit		
Khiem Nguyen	2839		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 18 November 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-83 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1,3-9,14-19,26-28,33-38,50,53,60,65,77,80,82 and 83 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) 2, 10-13, 20-25, 29-32, 39-49, 51-52, 54-59, 61-64, 66-76, 78-79, 81 are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT/R.1, 17.2(1)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

1. Applicant's election without traverse of the species of Figures 7A-C in Paper No. 5 is acknowledged. However, claims 10, 20, 22-25, 29, 39-49, 51-52, 54-58, 61-64, 78, and 81 are not being examined since they do not seem to read on the elected species. For example, claims 10 and 20 each recites a second cladding which is not disclosed in the elected species. Further the claims to the laser systems are not generic to the elected species. For example, the elected species of figures 7A-C do not disclose the claimed saturable absorber modelocking as being recited in claims 39-40. An examination of the application of the present invention follows:

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-9, 14-19, 26-28, 33-38, 50, 53, 60, 65, 77, 80, 82-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiGiovanni (5,949,941).

3. DiGiovanni (Fig. 3A) discloses a polarization maintaining fiber comprising a fiber core 42; a first cladding 44 surrounding said core; a coating 48 surrounding said first cladding; at least one stress producing region located within said first cladding.

Regarding claim 1, the prior art in figure 1A of DiGiovanni disclosed that it is known to construct the first cladding with a cross sectional shape in the form of a hexagon. Therefore, it also would have been obvious to construct the first cladding of DiGiovanni's fiber with a distorted hexagon or a polygon for function benefits to be

derived from using asymmetrical features (see column 2, lines 21-22). Regarding claim 9, DiGiovanni shows at least one stress producing region includes at least one stress rod. Regarding the claimed fiber core being doped with a rare earth element dopant or various dope element is deemed old and well known in the art. DiGiovanni discloses that it is known to dope the fiber core with a rare-earth dopants (see column 4 lines 25-27). Regarding the dimension of the minimum fiber outside diameter and the different claimed birefringence values of the claimed optical fiber of the instant invention are deemed obvious change in size/range and optimum ranges, *In re Rose*, 105 USPQ 237 and *In re Aller*, 105 USPQ 233. Therefore, it would have been obvious for one of ordinary skill in the art to provide or construct the optical fiber of DiGiovanni with the claimed minimum fiber outside diameter and with the claimed birefringence values for providing the optimum results in the required application desired.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Onstott et al. is further cited to show a polarization-maintaining optical fiber.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khiem Nguyen whose telephone number is 571 272-2096. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571 272-2800 ext 39. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2839

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Khiem Nguyen
Primary Examiner
Art Unit 2839